



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/616,186

07/09/2003

Thomas B. Johnston

20060-1-0010

9679

26135 7590 01/24/2007
LOTT & FRIEDLAND, P.A.
P.O. BOX 141098
CORAL GABLES, FL 33114-1098

EXAMINER

STRIMBU, GREGORY J

ART UNIT

PAPER NUMBER

3634

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
--	-----------	---------------

3 MONTHS

01/24/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/616,186

Applicant(s)

JOHNSTON, THOMAS B.

Examiner

Gregory J. Strimbu

Art Unit

3634

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 August 2006 and 15 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6, 8-13, 16, 17, 19-26, 28-34, 37, 38, 40-42 and 44-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-13, 16, 17, 19-26, 28-34, 37, 38, 40-42, 44-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

Drawings

The drawing corrections filed on January 12, 2005 and October 21, 2005 have been approved.

Claim Rejections - 35 USC § 112

Claims 1-6, 8-13, 16, 17, 19-26, 28-34, and 37 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Recitations such as "means for locking said louvers into a closed position" on line 7 of claim 1 render the claims indefinite because it is unclear what structure performs the function of locking the louvers. See paragraph 25, lines 13-15 which merely set forth that the L-angle can be used to lock the louvers in position, however, it is unclear how an L-angle, without more, can lock the louvers in position. Also, see paragraph 26 which sets forth that the L-angle can be used with any device that holds the operating mechanism in a fixed position, but fails to set forth any examples. Accordingly, it cannot be determined what structure performs the recited locking function. It is suggested the applicant insert --the-- or --said-- before "hurricane" on line 15 of claim 1 to avoid confusion. Also see recitations such as "means for holding said shutter against an external opening" on line 9 of claim 1 which suffers from the same problem since it is unclear how the Z bar functions to hold the shutter against the structure. Recitations such as "and protects said external opening" on lines 16-17 of claim 1 render the claims indefinite because it is unclear if the applicant is claiming the subcombination of a

Art Unit: 3634

shutter or the combination of a shutter and an external opening. The preamble of claim 1 implies the former while the positive recitation of the opening on lines 16-17 of claim 1 implies the latter. Recitations such as "a closed position" on line 2 of claim 10 render the claims indefinite because it is unclear if the applicant is referring to the closed position set forth above or is attempting to set forth another closed position in addition to the one set forth above.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 4, 5, 8, 11, 17, 21, 22, 24, 25, 28 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zveibil in view of Arehart et al.

Zveibil discloses a shutter providing protection from hurricane force winds of approximately 75 miles per hour to approximately 225 miles per hour comprising: an outer frame 10 formed by a pair of vertical members (not numbered, but shown in figure 1) and a pair of horizontal members (not numbered, but shown in figure 1) connected to each other and defining an interior area; a plurality of functional horizontal louvers 18 movably connected to said outer frame and substantially filling said interior area of said frame; wherein said pair of horizontal members includes an upper member and a lower member said upper horizontal member being connectable above said external opening

Art Unit: 3634

in a structure by at least one hinge 12 wherein said shutter is movable about said at least one hinge and wherein said shutter is resistant to hurricane force winds of approximately 75 miles per hour to approximately 225 miles per hour and said shutter protects said external opening in said structure from being damaged from said hurricane force winds wherein said damage is caused by wind force or debris being carried by said hurricane force wind, an operating mechanism/locking means 32 which holds the louvers at a maximum point of rotation, i.e., the closed position (see column 2, lines 54-58), means for holding the shutter apart from the building (not shown, but see column 2, lines 8-11). Zveilbil is silent concerning a holding means.

However, Arehart et al. discloses a means for holding a frame against a structure comprising holes and bolts 42. The frame having an aluminum construction.

It would have been obvious to one of ordinary skill in the art to provide Zveilbil with a holding means and aluminum construction, as taught by Arehart et al., to enable a user to releasably fix the shutter to the structure to prevent an intruder from pivoting open the louver assembly while improving the corrosion resistance of the shutter assembly.

Since Zveilbil, as modified above, discloses the structure of the applicant's invention, Zveilbil must perform the same as the applicant's invention, i.e., provide protection from hurricane force winds.

Claims 1, 2, 4, 5, 8, 12, 21, 22, 24, 25, 28 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zveilbil in view of Astrizky.

Art Unit: 3634

Zveilbil discloses a shutter providing protection from hurricane force winds of approximately 75 miles per hour to approximately 225 miles per hour comprising: an outer frame 10 formed by a pair of vertical members (not numbered, but shown in figure 1) and a pair of horizontal members (not numbered, but shown in figure 1) connected to each other and defining an interior area; a plurality of functional horizontal louvers 18 movably connected to said outer frame and substantially filling said interior area of said frame; wherein said pair of horizontal members includes an upper member and a lower member said upper horizontal member being connectable above said external opening in a structure by at least one hinge 12 wherein said shutter is movable about said at least one hinge and wherein said shutter is resistant to hurricane force winds of approximately 75 miles per hour to approximately 225 miles per hour and said shutter protects said external opening in said structure from being damaged from said hurricane force winds wherein said damage is caused by wind force or debris being carried by said hurricane force wind, an operating mechanism/locking means 32 which holds the louvers at a maximum point of rotation, i.e., the closed position (see column 2, lines 54-58), means for holding the shutter apart from the building (not shown, but see column 2, lines 8-11). Zveilbil is silent concerning a holding means.

However, Astrizky discloses a means for holding a frame of a door 50 against a structure 10 comprising an L-angle bracket 24. Additionally, Astrizky discloses the use of polycarbonate 87 for storm protection.

It would have been obvious to one of ordinary skill in the art to provide Zveilbil with a holding means and polycarbonate construction, as taught by Astrizky, to increase

Art Unit: 3634

the support of the non-hinged end of the shutter during a hurricane and increase the durability of the shutter.

Since Zveilbil, as modified above, discloses the structure of the applicant's invention, Zveilbil must perform the same as the applicant's invention, i.e., provide protection from hurricane force winds.

Claims 1, 2, 4, 5, 8, 16, 21, 22, 24, 25, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zveilbil in view of Goldhaber.

Zveilbil discloses a shutter providing protection from hurricane force winds of approximately 75 miles per hour to approximately 225 miles per hour comprising: an outer frame 10 formed by a pair of vertical members (not numbered, but shown in figure 1) and a pair of horizontal members (not numbered, but shown in figure 1) connected to each other and defining an interior area; a plurality of functional horizontal louvers 18 movably connected to said outer frame and substantially filling said interior area of said frame; wherein said pair of horizontal members includes an upper member and a lower member said upper horizontal member being connectable above said external opening in a structure by at least one hinge 12 wherein said shutter is movable about said at least one hinge and wherein said shutter is resistant to hurricane force winds of approximately 75 miles per hour to approximately 225 miles per hour and said shutter protects said external opening in said structure from being damaged from said hurricane force winds wherein said damage is caused by wind force or debris being carried by said hurricane force wind, an operating mechanism/locking means 32 which holds the

louvers at a maximum point of rotation, i.e., the closed position (see column 2, lines 54-58), means for holding the shutter apart from the building (not shown, but see column 2, lines 8-11). Zveibil is silent concerning a holding means.

However, Goldhaber discloses a Z bar 16 for holding a closure 100 against an opening (not numbered, but seen in figure 5) and a plurality of screws 55.

It would have been obvious to one of ordinary skill in the art to provide Zveibil with a holding means, as taught by Goldhaber, to increase the support of the non-hinged end of the shutter during a hurricane.

Since Zveibil, as modified above, discloses the structure of the applicant's invention, Zveibil must perform the same as the applicant's invention, i.e., provide protection from hurricane force winds.

Claims 3, 9, 23, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zveibil in view of Astrizky, as applied to claims 1, 2, 4, 5, 8, 12, 21, 22, 24, 25, 28 and 33 above and further in view of Lane. Lane discloses an L angle bracket operating mechanism 20.

It would have been obvious to one of ordinary skill in the art to provide Zveibil, as modified above, with an operating mechanism, as taught by Lane, to increase the strength of the operating mechanism.

Claims 6 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zveibil in view of Astrizky as applied to claims 1, 2, 4, 5, 8, 12, 21, 22, 24, 25, 28 and 33

Art Unit: 3634

above, and further in view of Vaida. Vaida discloses a winding crank operating mechanism 46.

It would have been obvious to one of ordinary skill in the art to provide Zveibil, as modified above, with a winding crank operating mechanism, as taught by Vaida, to increase the ease with which the louvers can be moved.

Claims 10, 30 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zveibil in view of Astrizky as applied to claims 1, 2, 4, 5, 8, 12, 21, 22, 24, 25, 28 and 33 above, and further in view of Yadidya. Yadidya discloses louvers 1 which interlock with each other in a closed position.

It would have been obvious to one of ordinary skill in the art to provide Zveibil, as modified above, with louvers, as taught by Yadidya, to prevent air from passing through the shutter when the louvers are closed.

Claims 13 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zveibil in view of Arehart et al. as applied to claims 1, 2, 4, 5, 8, 11, 17, 21, 22, 24, 25, 28 and 32 above, and further in view of Patberg et al. Patberg et al. discloses the use of high density foam plastic for impact resistance.

It would have been obvious to one of ordinary skill in the art to provide Zveibil, as modified above, with a high density foam plastic construction, as taught by Patberg et al., to increase the impact resistance of the shutter.

Art Unit: 3634

Claims 19, 20 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zveibil in view of Astrizky as applied to claims 1, 2, 4, 5, 8, 12, 21, 22, 24, 25, 28 and 33 above, and further in view of Kramer. Kramer discloses a telescoping means for holding a lower horizontal member comprising a telescoping arm 15.

It would have been obvious to one of ordinary skill in the art to provide Zveibil, as modified above, with a telescoping arm, as taught by Kramer, to enable a user to position the shutter in a plurality of positions pivoted away from the structure.

Claims 38 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zveibil in view of Lane, Yadidya, and Astrizky. Zveibil discloses a hurricane shutter comprising an outer frame 10 forming an interior area, a plurality of louvers 18 extending horizontally across said interior area, an upper horizontal member (not numbered, but shown in figure 1) and a lower horizontal member (not numbered, but shown in figure 1), said upper horizontal member being connectable above an external opening in a structure by at least one hinge 12 wherein said shutter is movable about said at least one hinge; at least one operator 32 movably connected to said louvers such that said operator lies perpendicular to said louvers, wherein said operator functions to actuate said louvers by slidably engaging the louvers at the pins 36 and the operator 32 locks said louvers in a closed position by holding the louvers at a maximum point of rotation, and wherein said louvers each contain a hook-type structure 40 on each horizontal each edge of said louver and wherein said hooks face in opposite directions on each louver and wherein said shutter is resistant to hurricane force winds

Art Unit: 3634

of approximately 75 miles per hour to approximately 225 miles per hour and said shutter protects said window from being damaged from said hurricane force winds wherein said damage is caused by wind force or debris being carried by said hurricane force wind.

Zveibil is silent concerning L-angle brackets and interlocking louvers.

However, Lane discloses an L angle bracket operating mechanism 20.

It would have been obvious to one of ordinary skill in the art to provide Zveibil with an operating mechanism, as taught by Lane, to increase the strength of the operating mechanism.

Additionally, Yadidya discloses louvers 1 which interlock with each other in a closed position.

It would have been obvious to one of ordinary skill in the art to provide Zveibil with louvers, as taught by Yadidya, to prevent air from passing through the shutter when the louvers are closed.

Finally, Astrizky discloses a L-angle bracket 24 attached to a structure 10 to hold a shutter 50 in a closed position and discloses the use of polycarbonate 87 for storm protection.

It would have been obvious to one of ordinary skill in the art to provide Zveibil with an L-angle bracket and a polycarbonate construction, as taught by Astrizky, to securely hold the frame relative to the building and to increase the durability of the shutter, respectively.

Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zveibil in view of Lane, Yadidya, and Astrizky as applied to claims 38 and 41 above, and further in view of Arehart et al. Arehart et al. discloses an aluminum construction.

It would have been obvious to one of ordinary skill in the art to provide Zveibil, as modified above, with an aluminum construction, as taught by Arehart et al., to improve the corrosion resistance of the shutter.

Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zveibil in view of Lane, Yadidya, and Astrizky as applied to claims 38 and 41 above, and further in view of Patberg et al. Patberg et al. discloses the use of high density foam plastic.

It would have been obvious to one of ordinary skill in the art to provide Zveibil, as modified above, with a high density foam plastic construction, as taught by Patberg et al., to increase the impact resistance of the shutter.

Claims 44 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zveibil in view of Lane, Yadidya, and Astrizky as applied to claims 38 and 41 above, and further in view of Kramer. Kramer discloses a telescoping means for holding a lower horizontal member comprising a telescoping arm 15.

It would have been obvious to one of ordinary skill in the art to provide Zveibil, as modified above, with a telescoping arm, as taught by Kramer, to enable a user to position the shutter in a plurality of positions pivoted away from the structure.

Claim 46 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zveibil in view of Lane, Yadidya, and Astrizky as applied to claims 38 and 41 above, and further in view of Man. Man discloses a shutter comprising a fiberglass construction.

It would have been obvious to one of ordinary skill in the art to provide Zveibil, as modified above, with a fiberglass construction, as taught by Man, to reduce the weight of the shutter while maintaining strength. See column 1, lines 35-39.

Claim 47 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zveibil in view of Lane, Yadidya, and Astrizky as applied to claims 38 and 41 above, and further in view of Edwards. Edwards discloses a shutter comprising steel louvers. See column 1, lines 19-20.

It would have been obvious to one of ordinary skill in the art to provide Zveibil, as modified above, with steel louvers, as taught by Edwards, to reduce the cost of manufacturing the shutter.

Response to Arguments

Applicant's arguments filed May 15, 2006 have been fully considered but they are not persuasive.

With respect to the applicant's comments concerning the means for locking the louvers in a closed position when said means holds said louvers at a maximum point of rotation, the examiner respectfully disagrees. It should first be noted that the structure which performs the function of locking the louvers is not entirely clear. It appears that

Art Unit: 3634

paragraph 25 fails to discuss how the L-angle bracket locks the louvers into place. It seems that paragraph 26 more accurately describes the locking aspect of the invention as securing the L-angle to the structure near the window. See paragraph 26, lines 8-10. The structure which actually performs this function is, however, not specifically set forth in either paragraph 25 or paragraph 26. Therefore, the means for locking the louvers in a closed position is no more than the louver operator itself which has already been disclosed by the reference(s) applied above. Since the L-angle bracket is structurally equivalent to the operator 32 of Zveilbil, Zveilbil, as applied above, anticipates the applicant's claimed invention.

The applicant's comments concerning the rejection of claim 38 is moot in view of the new grounds of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any


Art Unit: 3634

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory J. Strimbu whose telephone number is 571-272-6836. The examiner can normally be reached on Monday through Friday 8:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Cuomo can be reached on 571-272-6856. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Gregory J. Strimbu
Primary Examiner
Art Unit 3634
January 19, 2006